**~~Don’t~~ Play With Your Food**

**Teacher notes**

* **Time needed to complete lab:** Approximately 90 minutes
* **Target grade level**: middle school
* **Objectives:** Students will learn that hydrocolloids are frequently added to our foods to change the texture. Hydrocolloids are also added to replace more expensive ingredients.
* **Major concepts**: Hydrocolloids are polymers. In this case, the polymers help to hold food together.
* **Preparation:** Ensure that all students are wearing gloves and that all long hair is tied back. Please be aware that this lab alters the texture of known foods and that not all students will enjoy the final product.
* **Additional References:** <http://www.molecularrecipes.com/spherification/>
* **Extension:** The spherification of apple juice recipe included could be modified to be used with other juices. Students could test for pH and then calculate exactly how much sodium alginate would need to be used. Reverse spherification could also be investigated. (Reverse spherification is when you add the calcium salt to the liquid being spherified and then the liquid is placed into a sodium alginate bath.)